

Attorney Docket No.: ISPH-0769
Inventors: Monia and Dobie
Serial No.: 10/653,528
Filing Date: September 2, 2003
Page 2

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A compound 8 to 80 nucleobases in length targeted to a coding region of a nucleic acid molecule of SEQ ID NO:4 encoding human histone deacetylase 2, wherein said compound specifically hybridizes with ~~said region and inhibits the expression of human histone deacetylase 2 to nucleobases 787-815 of a coding region of a nucleic acid molecule encoding human histone deacetylase 2 (SEQ ID NO:4).~~

Claim 2 (original): The compound of claim 1 which is an antisense oligonucleotide.

Claim 3 (original): The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified internucleoside linkage.

Claim 4 (original): The compound of claim 3 wherein the modified internucleoside linkage is a phosphorothioate linkage.

Attorney Docket No.: ISPH-0769
Inventors: Monia and Dobie
Serial No.: 10/653,528
Filing Date: September 2, 2003
Page 3

Claim 5 (original): The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified sugar moiety.

Claim 6 (original): The compound of claim 5 wherein the modified sugar moiety is a 2'-O-methoxyethyl sugar moiety.

Claim 7 (original): The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified nucleobase.

Claim 8 (original): The compound of claim 7 wherein the modified nucleobase is a 5-methylcytosine.

Claim 9 (original): The compound of claim 2 wherein the antisense oligonucleotide is a chimeric oligonucleotide.

Claim 10 (original): A composition comprising the compound of claim 1 and a pharmaceutically acceptable carrier or diluent.

Claim 11 (original): The composition of claim 10 further comprising a colloidal dispersion system.

Claim 12 (original): The composition of claim 10 wherein the compound is an antisense oligonucleotide.

Claim 13 (original): A method of inhibiting the expression of histone deacetylase 2 in cells or tissues comprising

Attorney Docket No.: ISPH-0769
Inventors: Monia and Dobie
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Filing Date: September 2, 2003
Page 4

contacting said cells or tissues with the compound of claim 1 so
that expression of histone deacetylase 2 is inhibited.